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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,496	07/11/2003	Yoshio Suzuki	7217/64306	3996

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EXAMINER

TRAN, THUY V

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,496

Applicant(s)

SUZUKI ET AL.

Examiner

THUY V. TRAN

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 4-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 10 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 5 is/are rejected.
- 7) ☒ Claim(s) 6-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/829,735.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

This is a response to the Applicants' filing on 07/11/2003 and preliminary amendment filed concurrently. According to the information provided therein, claims 1-9 are originally filed, claim 3 is cancelled, claim 10 is newly added, and thus, claims 1-2 and 4-10 are now presented in the instant application.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/829,735, filed on April 10th, 2001.

Inventorship

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Abstract objection

3. The amended abstract is objected to because of the following informalities:
Line 1, "electromagnetic (EL)" should be changed to --electroluminescent display--.
Correction is required. See MPEP § 608.01(b).

Specification Objection

4. The specification of the disclosure is objected to because of the following informalities:

Before the section "BACKGROUND OF THE INVENTION", the following paragraph should be inserted:

--This is a division of Application Serial Number 09/829,735 filed on April 10th, 2001, which is now U.S. Patent No. 6,603,270--.

Appropriate correction is required.

Claim Objections/ Minor Informalities

5. Claims 1, 5-6, and 10 are objected to because of the following informalities:

Claim 1, line 2, --:-- should be inserted after "comprising";

Claim 1, line 16, --of-- should be inserted between "plurality" and "display";

Claim 5, line 3, --each of-- should be inserted before "said", and "are" should be changed to --is--;

Claim 6, lines 3 and 4, "a" (second occurrences) should be changed to --the--; and

Claim 10, line 3, "placedon" should be changed to --placed on--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent

resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Odake et al. (U.S. Patent No. 6,426,595).

With respect to claim 1, Okada et al. discloses, in Fig. 2, a direct-view-type display apparatus comprising (1) a plurality of individual display elements (which are made of column electrodes [Y], row electrodes [X], and organic layers [4]; see col. 3, lines 46-51 and col. 4, lines 29-31) placed on a single transparent substrate [5]; wherein (i) each of the plurality of display elements has a plurality of signal electrodes [(YA1, ..., YA640); ...; (YD1, ..., YD640)] and scanning electrodes [some of (X1, ... X480)] (see col. 3, lines 44-58) in a matrix form with a light-emitting element [4] at each intersection of the matrix, and (ii) a space between adjacent ones of the display elements is equal to a space between a signal electrode and a scanning electrode (see Fig. 2), such that each of the plurality of display elements forms a separate pattern; and (2) a plurality of drive circuits [10] (see Fig. 2; col. 3, lines 63-64) provided in correspondence to the plurality of display elements are mounted respectively on a plurality of circuit substrates [9] (see Fig. 3; col. 3, lines 63-64) for supplying signals to the plurality of signal electrodes and scanning electrodes of the plurality of display elements (see Fig. 2).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Otake et al. (U.S. Patent No. 6,426,595) in view of Shioya et al. (U.S. Patent No. 6,091,382).

With respect to claim 2, Otake et al. discloses, in Fig. 2, all of the claimed subject matter, as expressly recited in claim 1, except for the transparent substrate being a film-like substrate.

Shioya et al. discloses, in Figs. 1, 13, and 16, an EL display device employing a substrate [12] formed of a synthetic resin, which is a thin, flexible, or in other words, film-like substrate (see col. 14, lines 20-21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the display device of Otake et al. by, in lieu of the transparent glass substrate of Otake et al., employing a film-like substrate as taught by Shioya et al. in order to prevent an operation error and thus to ensure the overall performance of the display device since Shioya et al. teaches that, for such a use of a film-like substrate, attenuation of signal light can be suppressed and the radiatively emitted signal light can be prevented (see col. 14, lines 21-26).

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Otake et al. (U.S. Patent No. 6,426,595) in view of Matsuzawa (JP-Patent No. JP402096793).

With respect to claim 5, Otake et al. discloses, in Fig. 2, all of the claimed subject matter, as expressly recited in claim 1, except for each of the circuit substrates being covered with an elastic material.

Matsuzawa discloses, in Fig. 1a, an EL display device employing an elastic material [8] for covering a substrate [PCB 4].

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the display device of Otake et al. by employing an elastic material to cover all the circuit substrates to prohibit the entry of dust, etc. since such a use of the elastic material for the stated purpose has been well known in the art as evidenced by the teachings of Matsuzawa (see Abstract translation sheet; line 2).

Allowable Subject Matter

11. Claims 10 and 4 would be allowed if claim 10 were corrected to overcome the objection set forth in this Office Action.
12. Claims 6-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Note that claim 6 should be corrected to overcome the objection set forth in this Office Action.
13. The following is a statement of reasons for the indication of allowable subject matter:
Prior art fails to disclose or fairly suggest:
 - A direct-view-type display device having a plurality of circuit substrates made of a material having a sealing property and having through-holes bored at positions opposing the signal electrode and the scanning electrode; the through-holes are covered by a conductive material having a sealing property; the circuit substrate is closely joined to the organic EL element such that the through-holes are opposed to the signal electrode and the scanning electrode; the drive circuit supplies a signal to the signal electrode and the scanning electrode through the conductive material having a sealing property and the organic EL element is covered at a portion that is

not jointed to the circuit substrate with a sealing material, in combination with the remaining claimed limitations as called for in claim 6; and

- A direct-view-type display device wherein each of the plurality of circuit substrates has through-holes bored at positions opposing at least some of the plurality of signal electrodes and the plurality of scanning electrodes, and wherein the through-holes are covered by an electrically conductive material, in combination with the remaining claimed limitations as called for in independent claim 10.

Citation of relevant prior art

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Sohn (U.S. Patent No. 4,888,077) discloses a method of manufacturing an EL display device.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THUY V. TRAN whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:30 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DON K. WONG can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

THUY V. TRAN
Examiner
Art Unit 2821

T.T.
04/02/2004

A handwritten signature in cursive script, likely belonging to Thuy V. Tran, the examiner mentioned in the text above.